DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 8-132 HONOLULU, HAWAII 96850

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Case Number: 21292

Submitter Name:

Species submitted (n):

Duck: Laysan (13)

Mr. John Klavitter

US Fish and Wildlife Service

PO Box 50167

Honolulu, Hawaii 96850

United States

SPECIMENS SUBMITTED: Carcass-Frozen

12 birds were found sick or dead at Eastern Island and one bird on Radar Hill at Midway Atoll NWR. Botulism was suspected based on field signs.

Acc	Date_Coll	Animal	Location	Diagnosis
1	6/13/2009	Duck: Laysan	Monument	Botulism type C
2	6/13/2009	Duck: Laysan	Monument	Botulism type C
3	6/13/2009	Duck: Laysan	Monument	Botulism type C
4	6/1/2009	Duck: Laysan	Radar	Botulism type C suspect
5	6/16/2009	Duck: Laysan	Monument	Botulism type C suspect
6	6/13/2009	Duck: Laysan	Monument	Botulism type C
7	6/13/2009	Duck: Laysan	Monument	Botulism type C
8	6/13/2009	Duck: Laysan	Monument	Botulism type C suspect
9	6/17/2009	Duck: Laysan	Rolando	Botulism type C suspect
10	6/13/2009	Duck: Laysan	Monument	Botulism type C suspect
11	6/14/2009	Duck: Laysan	Monument	Botulism type C
12	6/19/2009	Duck: Laysan	Sunset	Botulism type C suspect
13	6/13/2009	Duck: Laysan	Sunset	Botulism type C suspect

Comments: Field and laboratory data pointed to botulism as cause of death. Interestingly, in contrast to the 2008 event where the epicenter was the catchment pond on Sand Island, the epicenter here were Eastern Island seeps. Not all birds were tested for botulism either because antitoxin had been administered or the sample was insufficient for testing. All birds tested negative for avian influenza (NWHC).

Management: Please see previous management recommendations regarding botulism on Midway Atoll. Measure that have been recommended in the past include regular patrols, clearing of vegetation to enhance detection and removal of caracasses from wetlands, and water management (draining or flooding).

Report Date (mm/dd/yyyy): 7/28/2009 Necropy report: Available upon request

Copies of this report sent to:

Dr. Michelle Reynolds (USGS)

Ms. Gina Schultz (USFWS)

If you have questions regarding this case, contact Thierry M.Work MS, DVM, MPVM at 808-792-9520. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NOTE: Information in this report supersedes any information from previous reports regarding this case.